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We Claimi

Patent claims

- 1. A display instrument having at least two illuminated pointers which are located one on top of the other, are each composed of a head and a pointer lug and can be rotated independently of one another about a common display axis, the illuminated pointers being composed of a light-guiding material and each having a light entry face and the light injected there exiting on the 10 pointer lugs facing the the in that at least two of characterized for illuminated pointers (4, 6) there is a common light source, and in that the light is fed to the illuminated pointers (4, 6) via a light splitter (10). 15
- 2. The display instrument as claimed in claim 1, characterized in that the drive shaft (7) of a pointer serves as a light guide and a portion of the drive shaft (7) is embodied as a light splitter (10).
- 3. The display instrument as claimed in claim 2, characterized in that the light splitter (10) is plugged together with the main part (8) of the drive shaft (7).
 - 4. The display instrument as claimed in claim 2 or 3, characterized in that, in the light splitter (10), one portion of the light exits in the direction of the axis of rotation and a further portion exits perpendicular thereto.
- 5. The display instrument as claimed in claim 4, characterized in that the upper illuminated pointer (4) has a light entry face (30) which picks up the light exiting in the axial direction, this illuminated pointer (4) being plugged onto the light splitter (10).

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6. The display instrument as claimed in claim 5, characterized in that the lower illuminated pointer (6) has a light entry face which picks up the laterally exiting light.

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7. The display instrument as claimed in claim 6, characterized in that the head (12) of the lower illuminated pointer (6) surrounds the light splitter (10) in an annular shape and the light entry face is embodied on an inner generated surface (32) in the head (12).

8. The display instrument as claimed in one of the preceding claims, characterized in that the light splitter (10) has a frustum-shaped coaxial depression (21), the generated surface (24) of the frustum (23) serving as a reflection face for the laterally exiting light and the base face (25) serving as an exit face for the axially exiting light.





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Splitting of light in order to illuminate two coaxial pointers from one light guide

- 1 Display instrument
- 2 Dial
- 3 First drive unit
- 4 Illuminated pointer
- 5 Second drive unit
- 6 Illuminated pointer
- 7 Drive shaft
- 8 Main part
- 9 Actuating motor
- 10 Light splitter
- 11 Head
- 12 Head
- 13 Drive shaft
- 14 Gearwheel mechanism
- 20 Drilled hole
- 21 Depression
- 22 Cylindrical section
- 23 Frustum
- 24 Generated surface
- 25 Base face
- 30 Light entry face
- 32 Generated surface
- 33 Cap
- 34 Cover
- 35 Reflection face
- 40 Light-emitting diode

SEARCH WORDS:

LIGHT SPLITTER
COAXIAL POINTERS
FRUSTUM